

Bottom of existing  
end diaphragm

New support angle  
6" x 4" x  $\frac{3}{8}$ "  
attached to bottom  
of end diaphragm.

New  $\frac{1}{4}$ " thick trough

Existing Stiffener (Typ.)

Cut bottom of trough  
2" from end so trough  
excess hangs down  
evenly into drain pipe.

Steel clamp braced  
by  $\frac{1}{2}$ "  $\phi$  threaded  
rods grouted 4"  
min.

$\phi$  Exterior stringer

Place nuts above and  
below support angles  
to adjust trough slope.

Bottom of deck

New support angle  
6" x 4" x  $\frac{3}{8}$ "  
installed at constant  
cross slope toward  
drain pipe.

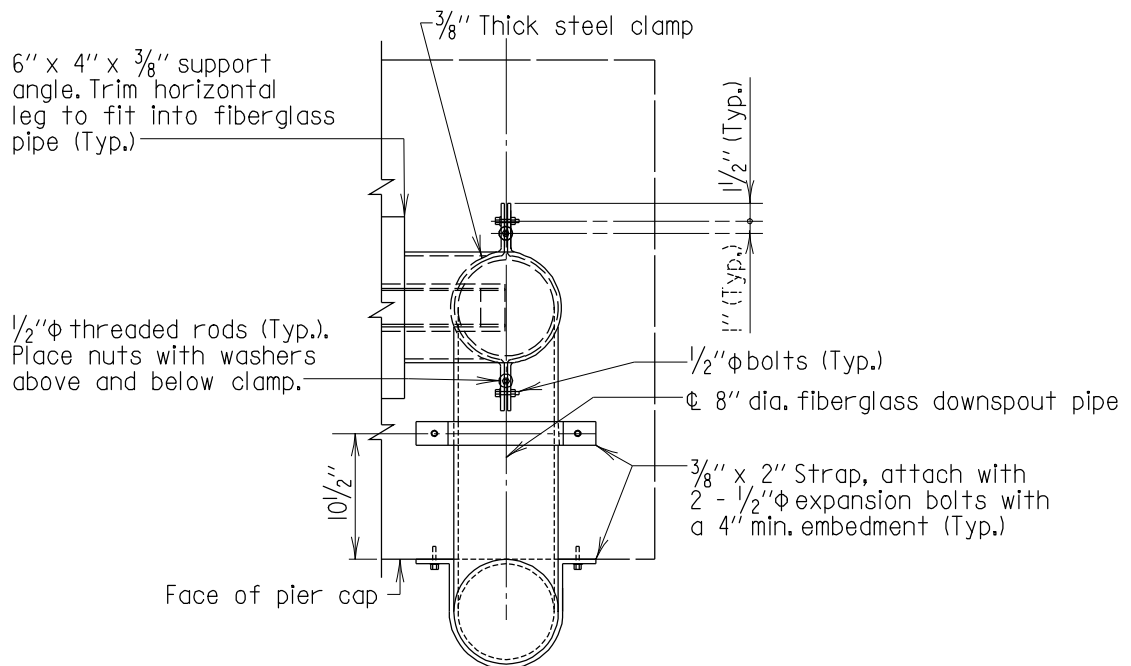
8"  $\phi$  fiberglass 90° elbow

8"  $\phi$  fiberglass downspout pipe  
to be attached to the  
pier with  $\frac{3}{8}$ " x 2"  
steel straps and  
 $\frac{1}{2}$ "  $\phi$  expansion bolts.

8"  $\phi$  fiberglass 90° elbow

### ALTERNATE DOWNSPOUT DETAIL AT PIER

Scale:  $\frac{3}{8}$ " = 1'-0"



### SECTION J-J

Scale:  $\frac{3}{4}$ " = 1'-0"

#### APPROVAL

*L.S. Friedman* DIRECTOR  
OFFICE OF BRIDGE DEVEL.

DATE: 11/14/95

#### REVISIONS

SHA	FHWA
1-23-97	
1-22-01	
7-14-08	

FHWA APPROVAL

DATE:

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF BRIDGE DEVELOPMENT

DRAINAGE TROUGH DETAIL AT PIER  
FOR EXISTING STRUCTURE

STANDARD NO. BR-SR(0.05)-95-308

SHEET 7 OF 8

STRUCTURAL REPAIRS